

REMARKS

The Official Action dated August 8, 2006 has been received and its contents carefully noted. In view thereof it is respectfully requested that the rejection of record be reconsidered and withdrawn by the Examiner in view of the following detailed discussion thereof. As previously, claims 7 and 8 are presently pending in the instant application.

Initially, Applicant hereby acknowledges the Examiner's indication on page 2 of the Office Action that the previous indication of allowability of claims 7 and 8 has been withdrawn in view of the newly discovered reference, US Patent No. 5,981,398 issued to Tsai et al. In view of the following comments, it is respectfully submitted that Applicant's claimed invention clearly distinguishes over the teachings of Tsai et al. and is in proper condition for allowance.

With further reference to page 2 of the Office Action, as noted above, claims 7 and 8 have now been rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 5,981,398 issued to Tsai et al. This rejection is respectfully traversed in that the patent to Tsai et al. neither discloses or suggests that which is presently set forth by Applicant's claimed invention.

Independent claim 7 recites an etching method comprising the step of performing anisotropic etching with respect to an inner layer insulating film composed of an organic-inorganic hybrid film containing an organic component and a silica component by using a plasma derived from an etching gas containing N₂ gas and a hydrogen fluoride gas. It is respectfully submitted that the patent to Tsai et al. fails to disclose or suggest this feature.

As the Examiner can readily appreciate, in accordance with Applicant's claimed invention, an etching method is set forth which allows anisotropic etching to be performed with respect to an inner layer insulating film composed of an organic-inorganic hybrid film

containing an organic component and a silica component as main constituents by using a plasma derived from an etching gas containing an N₂ gas and a hydrogen fluoride gas. In doing so, oxidization of the organic-inorganic hybrid film that is to be etched can be prevented.

While Tsai et al. discloses using a mixture gas for etching, with the gas containing an N₂ gas "as an inert gas" and a hydrogen fluoride gas, as the Examiner can readily appreciate the N₂ gas noted therein serves as an inert gas, and thus a carrier gas and does not contribute to the etching process. In accordance with Applicant's claimed invention, the N₂ gas included in the process contributes to the etching. As noted from Applicant's specification, another inert gas is included which does not contribute to the etching as noted from previous claim 10 as well as paragraph [0128],

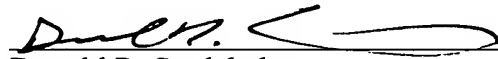
It appears from page 4 of the Office Action, the Examiner appreciates that Tsai et al. fails to disclose etching an organic-inorganic hybrid film containing an organic component and a silica component by using plasma derived from hydrogen fluoride and N₂. However, the Examiner goes on to state that it would have been obvious to one skilled in the art to etch the organic-inorganic hybrid layer of Tsai et al. with a plasma derived from hydrogen fluoride and nitrogen in that Tsai et al. teaches using plasma derived from hydrogen fluoride and the inert sputtering gas, and Tsai et al. teaches that N₂ is an inert sputtering gas. However, as noted hereinabove the N₂ gas referred to by the teachings of Tsai et al. is nothing more than a carrier gas and does not contribute to the etching as is the case in accordance with Applicant's claimed invention. Accordingly, it is respectfully submitted that Applicant's claimed invention as set forth in independent claim 7 as well as claim 8 which depends therefrom utilizes the N₂ gas and hydrogen fluoride gas as a plasma derived from the etching gas and not merely N₂ gas as a carrier gas which does not contribute to the etching as

is the case with Tsai et al. Accordingly, it is respectfully submitted that Applicant's claimed invention as set forth in claims 7 and 8 clearly distinguish over the teachings of Tsai et al. and are in proper condition for allowance.

Therefore, in view of the foregoing it is respectfully requested that the rejection of record be reconsidered and withdrawn by the Examiner, that claims 7 and 8 be allowed and that the application be passed to issue.

Should the Examiner believe a conference would be of benefit in expediting the prosecution of the instant application, he is hereby invited to telephone counsel to arrange such a conference.

Respectfully submitted,



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